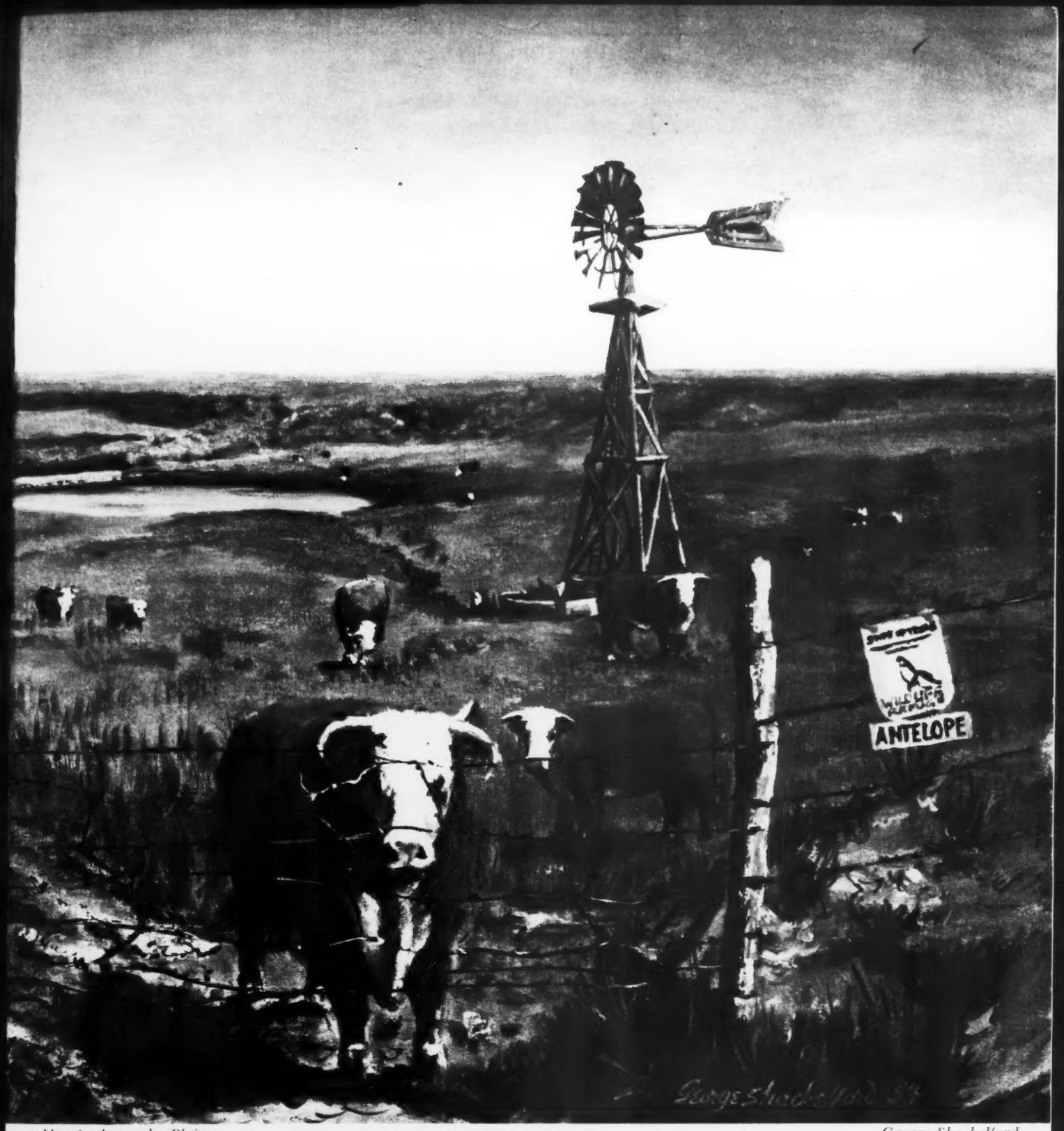

Herefords on the Plains — *George Shackelford*

The HUMBLE WAY

JULY-AUGUST, 1954

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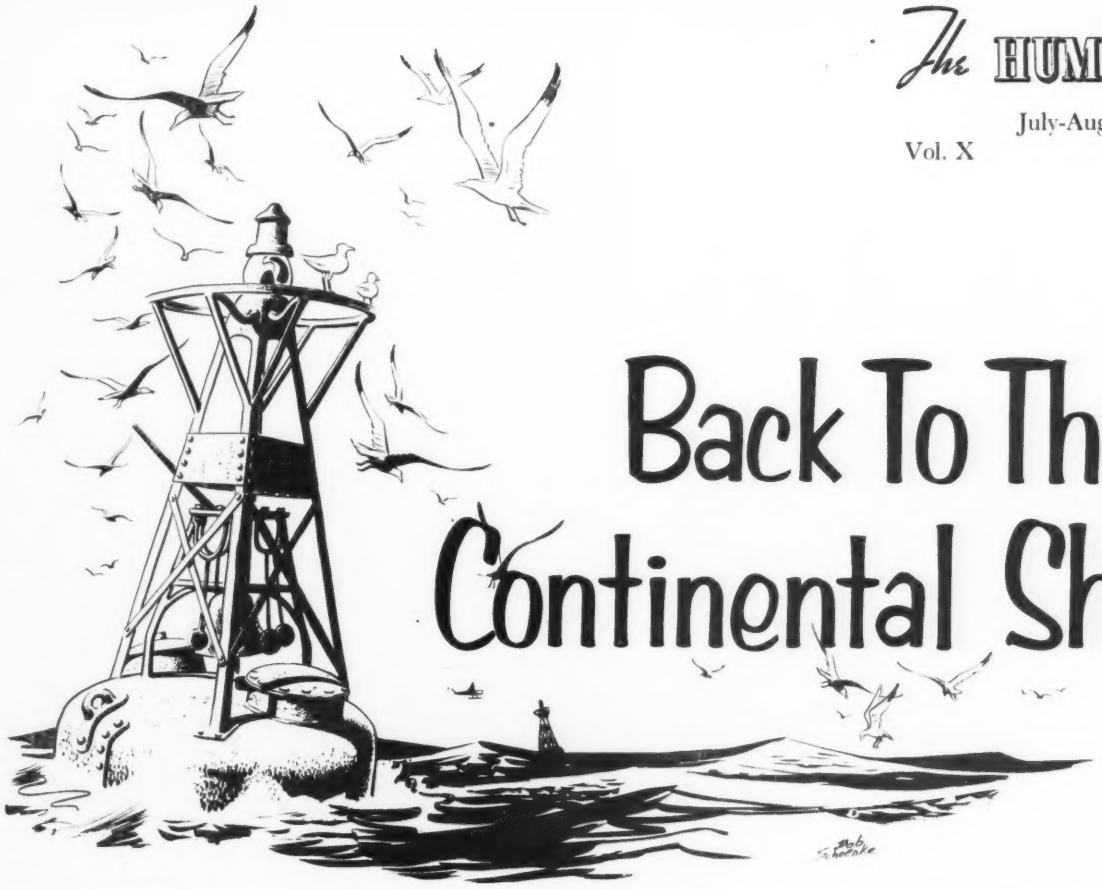
The HUMBLE WAY
July-August, 1954
Vol. X No. 2



Back To The Continental Shelf

"I must go down to the seas again,
To the lonely sea and the sky . . ."
—JOHN MASEFIELD

Once again, Humble Oil & Refining Company is going "down to the seas" —to the Continental Shelf off Louisiana and Texas—with a widespread program of exploration, wildcatting, and development drilling.

For some three years now Humble's offshore operations have been strictly limited. Drilling tenders lay silent in protected harbors; rigs were moved from deep-water platforms to drill again on dry land. The title to the undersea lands had been thrown in doubt by a decision of the U. S. Supreme Court, and the curtailment of operations was brought about by this uncertainty. Like other operators, Humble wanted to be absolutely sure of dealing with the true owners before making oil lease and other investments involving millions of dollars.

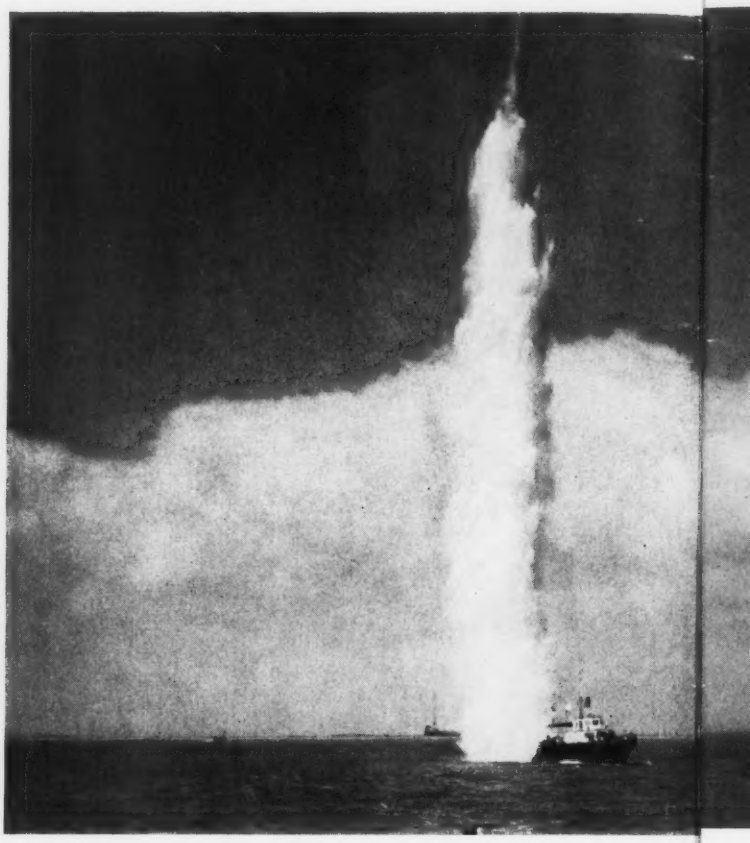
But last year the question of ownership was settled by Congressional action (with the States receiving title out to their historic limits), clearing the way for accelerated oil development. And in May of this year, the Humble Company announced that a $14.5 million offshore program for 1954 was underway. The program, as recently revised, includes:

- Four 14,000 foot wildcats off Louisiana. Two are now underway; one has been temporarily abandoned pending further evaluation.
- Two 12,000 foot wildcats off the coast of South Texas. One is drilling ahead and the platform is being constructed for the other.
- Eighteen development wells off Grand Isle, Louisiana. Seventeen have been planned to drill to 8,500 feet; one to 13,000 feet. Thus far six have been completed as oil wells; two are currently underway; and one has been abandoned as a dry hole. Five will be started late in the year and completed in 1955.
- Twenty core tests on Block 18 off Grand Isle at depths up to 2,500 feet. These core tests, in which subsurface "cores" are brought to the surface for examination, are being drilled from the movable platform shown on the opposite page and will provide information on the efficiency of this new approach to offshore drilling. The four holes drilled thus far have discovered a deposit of sulphur which is not yet completely evaluated. The tests will also provide additional valuable subsurface information on oil and sulphur.
- Construction of 11 drilling platforms, five for the wildcats and six for development wells. Several holes may be drilled from each platform by skidding the derrick a few feet, and the platforms may be extended for additional drilling if warranted. Three converted LST drilling tenders have been brought out of storage and overhauled to join three others in service with the offshore platforms.
- Construction of a seven-mile gathering line under the Gulf to producing wells off the Humble marine base at Grand Isle. This will be Humble's first offshore oil line and will eliminate use of barges to collect oil and lost production due to bad weather.

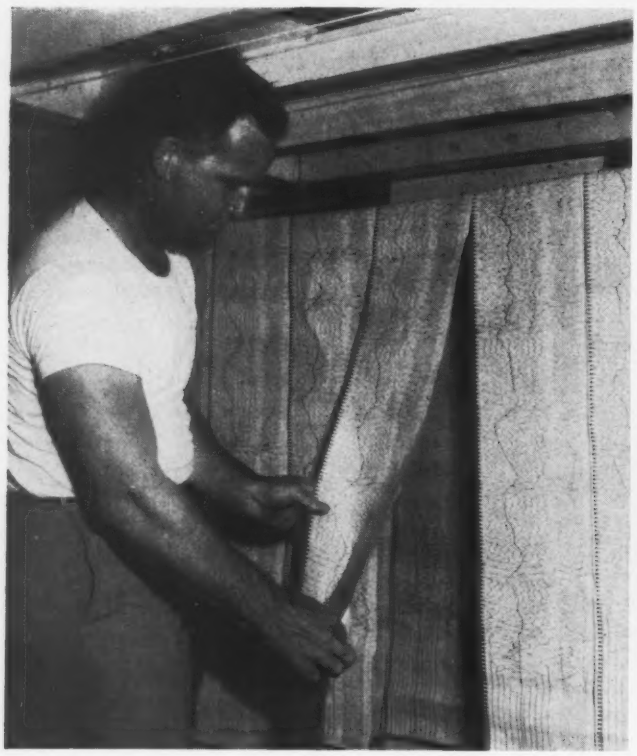
In addition to this program of drilling and development, Humble's geophysics exploration on the Continental Shelf continues apace.

One new approach to offshore drilling is this movable barge-on-legs, now being used by Humble on an experimental basis.

'Get set' is the radio order from chief of Humble geophysics crew exploring off Louisiana. Geophones and lines have been floated in water; explosive charge placed; position plotted.



'Fire!' comes the order, and a geyser of water rises high in the air. Reflections of sound waves from explosion will be recorded to give a picture of geologic features below



Clues to what lies below the bottom of the Gulf of Mexico are revealed in the wavy lines of seismograph recordings.

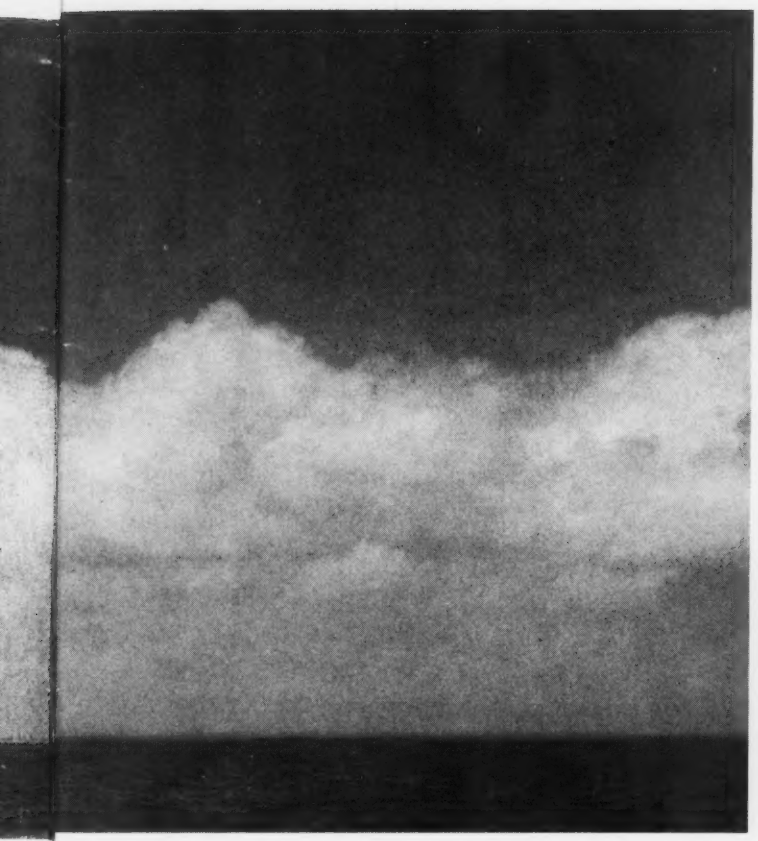
OFFSHORE EXPLORATION: RISKY VE

Since Congress settled the "tidelands question," more than a dozen major oil companies, including Humble, have returned to operations on the Continental Shelf.

But why "back to the Continental Shelf?"

Why go back to an area where the physical risks from wind and waves are tremendous; where the cost of a single

Listening cable and geophones are unreeled into the water by geophysics crewmen before making another offshore shot.



the ocean floor. Humble exploration crews like this have taken land experience to sea to find new possible oil-bearing structures. Two such crews are working offshore now.

KY VENTURE ON THE 'LONELY SEA'

wildcat may hit a million dollars before the drill ever starts turning; where it costs roughly three times as much to find, produce, and move a barrel of crude oil to a shipping point?

First, because the offshore lands seem to be our best frontier for new oil reserves. The geologists' theory that the Gulf of Mexico hides a continuation of the geology of the Gulf Coast, one of the world's great oil producing areas, has been conclusively proved by geophysics prospecting and by exploratory drilling thus far.

Second, competition for these potential new reserves. Humble scouts recently reported fourteen geophysics exploration crews working on an offshore block about to be put up for oil-lease bid by the State of Louisiana. Thirteen of these crews were working for Humble's competitors.

But there is more involved than reserves and competition. To make the trebled financial risks of offshore exploration worth taking, there must be adequate incentives. One of these incentives, of course, is a fair price for crude oil. Another is the continuation of the present 27½ per cent depletion allowance, a tax provision which takes into account the financial hazards of wildcatting for oil. (Of 87 offshore wildcats up to mid-year, only 27 made producing wells.)

Given these incentives, the oilmen's risky venture on the "lonely sea" holds promise of important new oil reserves for America.

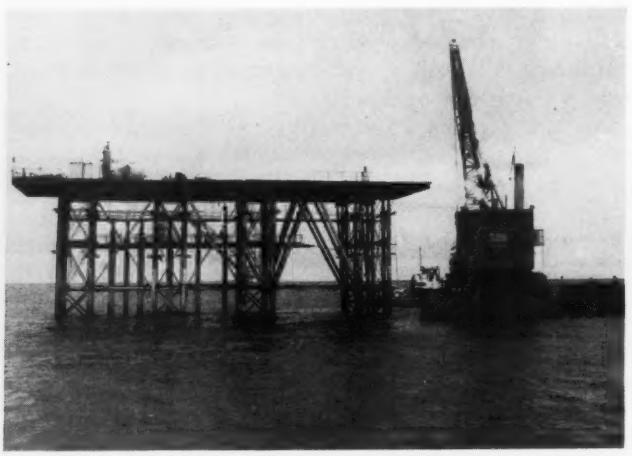
Texas offshore test is this Humble wildcat off St. Joseph Island, barely visible in the distance. Located about 14 miles northeast of Port Aransas, this test will go to depth of 12,000 feet. Geophysics exploration shows the way, but only the drill can prove the presence — or absence — of oil.

Continued 3

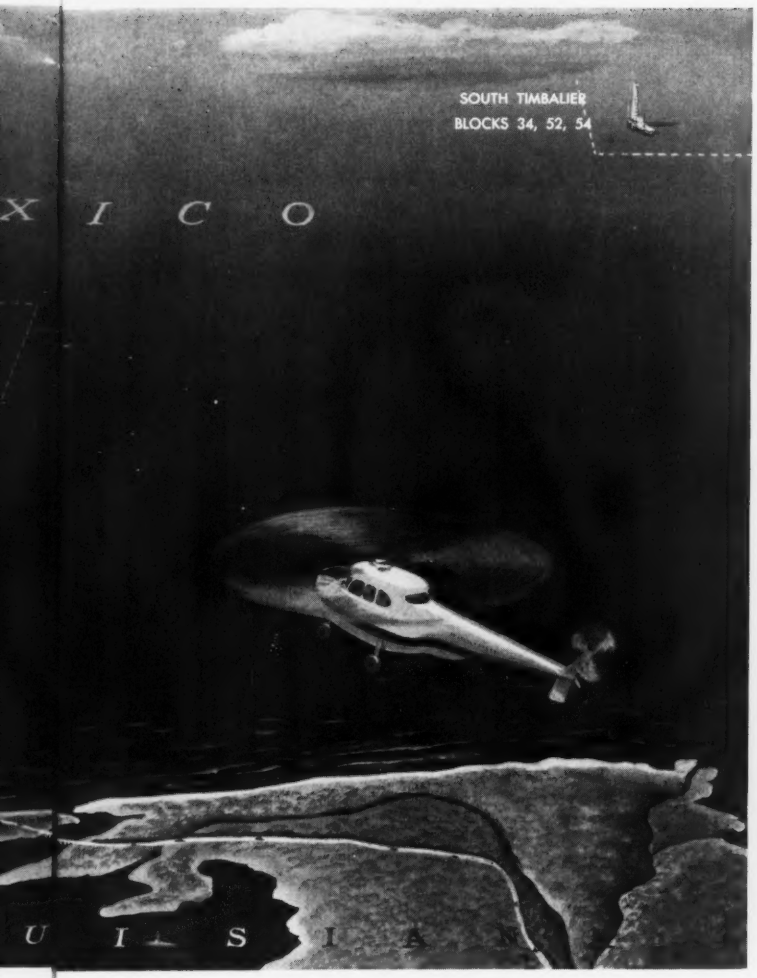
70 MILES OF OPEN GULF SPANNED BY OPERATIONS OFF LOUISIANA COAST

Offshore operations of the Humble Company are largely concentrated off the coast of Louisiana, with marine operating headquarters on Grand Isle. Oil production averages about 2,700 barrels per day from presently completed wells. Most oil comes ashore from 11 wells on Block 18 via a new underwater gathering line. Two field wells and a series of core tests are underway on this block, and 12 more field wells are

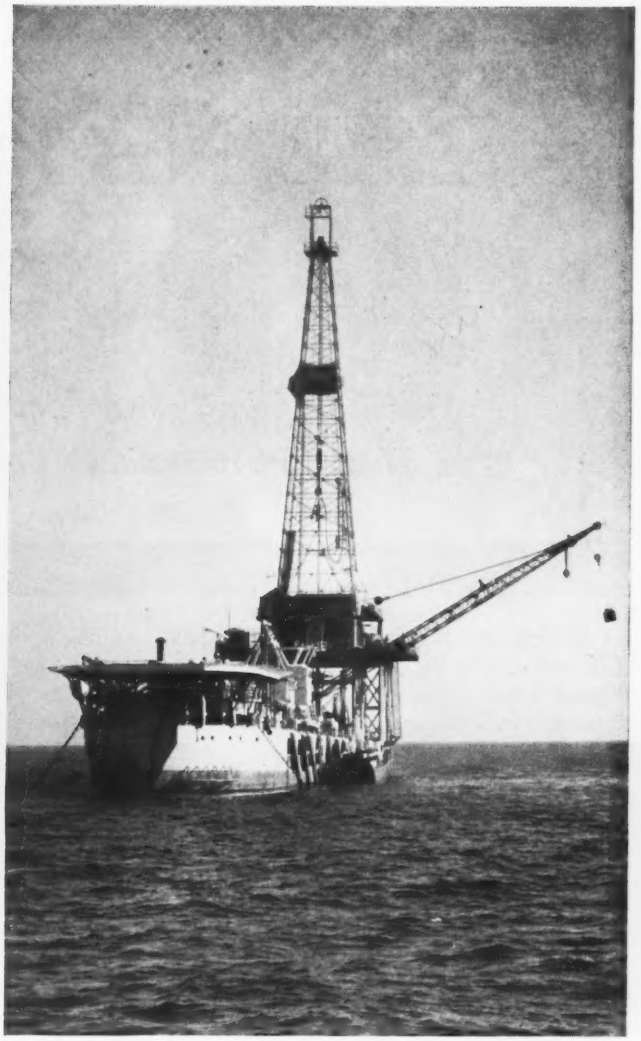
Company base for marine operations, located on Grand Isle, resembles naval supply outpost. From here men and materials move to offshore drilling rigs by helicopter as well as boat. Tall tower supports radar equipment and antennae for radio.



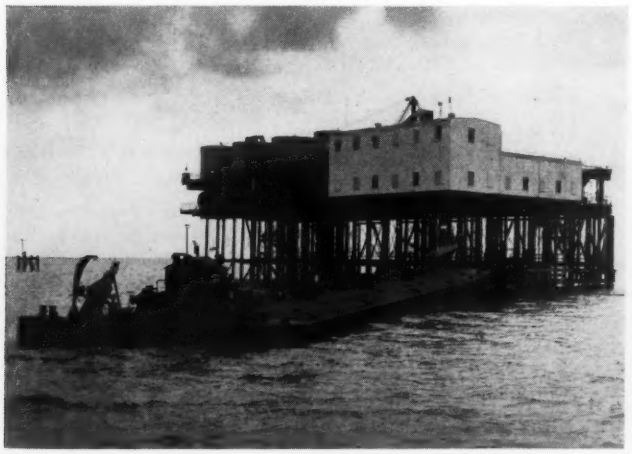
Six oil well Christmas trees are visible below the deck of C platform on Block 18. Deck is being raised to 40 feet above water as an added safety margin against hurricane waves. All new platforms are being constructed 40 feet above water.



scheduled here this year. On Block 16 are one oil well and five shut-in gas wells, with two field tests due during '54. On Block 27 are two shut-in gas wells; Block 30, two shut-in gas wells plus a wildcat now drilling; Block 34, one shut-in gas well; Block 52, a wildcat underway; and Block 54 is due a wildcat later this year. Gas wells are shut in because no gas pipe line yet extends into this area to provide a market.



Field well being drilled from platform D on Block 18 has been completed as a 283-barrel per day oil producer since this photo was made. Rig has been skidded ten feet and a new hole is underway. Up to ten may be drilled from same patform.



First drilling platform built by Humble was large, self-contained unit on Block 18. Platform A now has three oil wells and also serves as terminus for new gathering line which eliminates use of oil barges like the one shown above.

Underwater oil line is laid from barge with curved outrider. Joints of pipe are welded, coated, wrapped, and covered with cement before sliding off outrider to ocean floor. New line will largely eliminate loss of production due to bad weather.

THE NATURAL GAS QUESTION

Should the federal government regulate the price received by the producer for a competitively produced commodity—natural gas?

AT THE breakfast table some weeks ago, you may have noticed the headline, "Supreme Court Authorizes Federal Power Commission to Regulate Field Price of Natural Gas." Most readers, perhaps, hurried on to something more entertaining.

Yet that news story may affect you more than you think. The decision of the Court on June 7 has particular significance for some twenty million home owners who use natural gas, as well as for thousands of independent producers of natural gas.

The Supreme Court's interpretation apparently gives the Federal Power Commission the authority to regulate the price at which all independent producers sell natural gas to pipeline companies carrying the gas in interstate commerce for resale. By controlling this sales price, the Commission can likewise regulate much of the whole activity of producing and gathering natural gas. Thus, on that June day, the interpretation of the Supreme Court sanctioned government price regulation of a highly competitive segment of American industry.

You may well ask: Is this regulation necessary or desirable? How will it affect me?

We would not have been perplexed with such questions, undoubtedly, had not natural gas emerged so rapidly as one of America's leading fuels. Only a decade or so ago, relatively few of us were using natural gas outside of the areas in which it was produced. Discoveries brought about temporary surpluses which enabled the few "long-line" interstate transporters of gas to make long-term contracts at bargain prices. Field prices were so low that even after the cost of transportation for 1,000 or more miles, gas could undersell coal and fuel oil for residential and industrial use. Home owners jumped at the chance to obtain a fuel that was cheap, as well as clean and easy to handle.

Thus the great upsurge in the use of natural gas got under way. Take a look at some of the recent figures which justify calling natural gas "America's favorite post-war fuel":

- Production of natural gas has doubled in the last seven years.
- More than a million new customers a year are using natural gas.
- By March 31, 1954, natural gas utility customers totaled 21,005,500. These included:

  19,295,500 home owners
  1,607,700 commercial concerns
  76,700 industrial concerns
  25,600 others

- From 1949 to 1953, about $6,000,000,000 was spent on new gas transmission lines.

Undoubtedly, the great increase in demand for gas is due to the fact that in many cases this fuel is cheaper, as well as more convenient, than coal or oil for home owners. A glance at the following table shows comparative prices, adjusted to average retail prices of residential fuels. Source is the Bureau of Labor Statistics, with the prices adjusted for efficiency as follows: Gas—100, Oil—89, Coal—72.

	March, 1954		
	Coal	Oil	Gas
	(Cents per million BTU's)		
Chicago	110.0	114.0	105.3
Detroit	97.1	120.1	82.5
Minneapolis	110.6	109.6	75.6
St. Louis	103.1	113.1	75.6

The big reason why attractive consumer prices have prevailed for natural gas without any government regulation of the producer is that the business of producing gas is a highly competitive one. The Federal Power Commission states that there are about 4,000 independent producers of natural gas.

Literally thousands of producers compete in the production and sale of natural gas. The largest companies have relatively a minor share of this business. Records of the Federal Power Commission show that the 37 leading independent gas producing companies together receive less than half of the revenue from the sale of gas to pipeline companies.

Background of Regulation

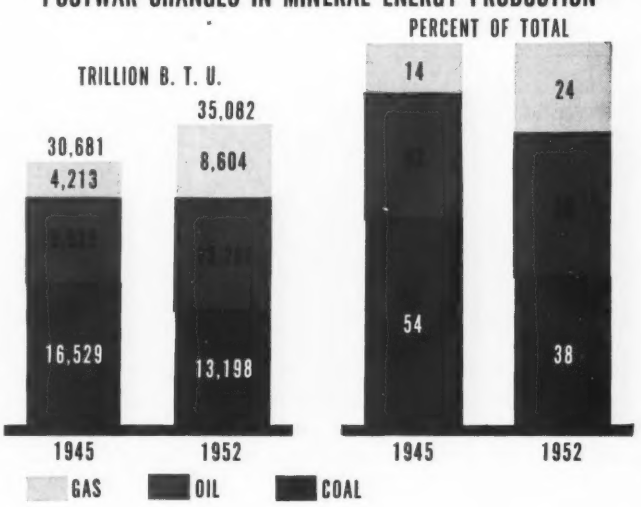
Federal regulation of interstate natural gas transportation began in 1938, when natural gas was still in its early stage of development as a residential fuel. Companies engaged in manufacturing and distributing artificial gas made from coal or oil were generally franchised and controlled by local government authority as public utilities. Many such companies quickly turned to natural gas when it became available at less cost than they could manufacture gas.

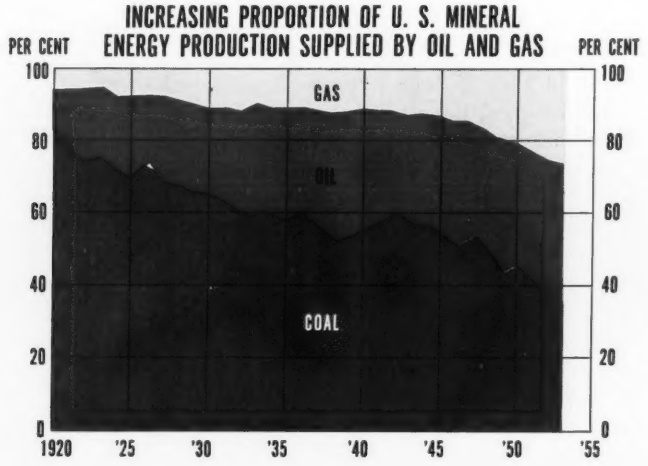
Even though this meant lower prices for consumers, some local utility commissions felt that the interstate pipelines were charging more than was reasonable, considering the prices at which these lines were buying gas. In other words, they felt that the companies engaged in transporting gas interstate and selling it to local distributing companies were making too much profit on their investment. But the local commissions were unable to do anything about this situation, because they had no authority over companies which transported the gas across state lines and then sold it to the local distributors. This led to a demand for federal regulation of interstate gas pipelines and resulted in the adoption by Congress in 1938 of the Natural Gas Act.

The Act recognized that the natural gas industry falls into three segments: (1) production and gathering of the gas; (2) transmission in interstate pipelines; (3) local distribution and sale. In the very first section, the Act specifically stated that its provisions "shall not apply . . . to the local distribution of natural gas or to the facilities used for such distribution or to the production or gathering of natural gas."

The purpose of the Natural Gas Act was emphasized by Justice William O. Douglas of the U. S. Supreme Court in his dissenting opinion on June 7: "The gap to be filled was that existing before the pipelines were brought under regulation—sales to distributors along the pipelines."

In its first hearings, the Federal Power Commission emphatically asserted that it had no jurisdiction over producers of natural gas. Later it asserted control over the charges for gas produced by interstate transporters subject to its regulation, and allowed these companies only a small return on the depreciated cost of their producing properties





without regard to their value. In 1946 a case arose over the sale of gas produced by one interstate pipe line company —Interstate Natural Gas Company—and sold to other interstate lines. The Commission asserted the right to regulate the field price at which Interstate Natural Gas Company sold to the other lines.

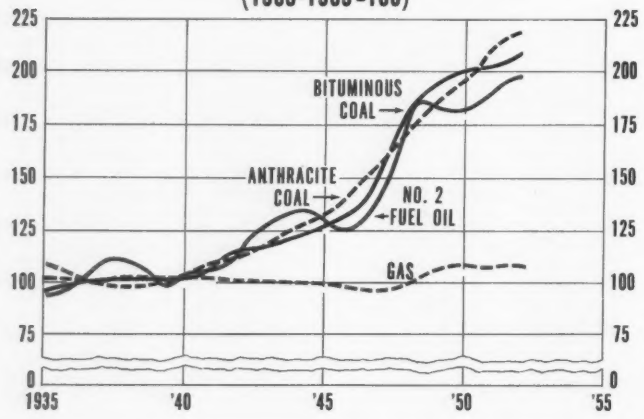
Despite these steps, the Commission consistently held that its authority was limited to natural gas companies engaged in transportation in interstate commerce and the sale of gas for resale. The Commission made it plain that it had no authority over the *independent* producer of natural gas who was not engaged in interstate transportation. To establish this point the Commission in 1947 issued Order No. 139, which read in part as follows:

> "The Commission gives its assurance to independent producers and gatherers of natural gas that they can sell at arm's length and deliver such gas to interstate pipelines and can enter into contracts for such sale without apprehension that in so doing they may become subject to assertion of jurisdiction by the Commission under the Natural Gas Act."

Because by this time there were some who sought to interpret the Natural Gas Act to authorize federal control of the field price of all gas moving in interstate commerce for resale, several bills were introduced in Congress to reaffirm the original intent that federal regulations should not apply to the price of gas at the time it is first sold to an interstate line. One of these bills, known as the Kerr Bill, passed both the Senate and the House of Representatives, but President Truman vetoed it.

The Phillips Petroleum case began in October, 1948. The Federal Power Commission began hearings to determine whether the sale of natural gas by Phillips to interstate pipelines fell under the jurisdiction of the Commission. Phillips is a large producer of natural gas, making substantial sales to interstate pipelines. About 50 per cent of the gas it sold in interstate commerce was produced by Phillips and the rest was bought by Phillips, for processing, from a number of other independent operators. After considerable study and debate, the Commission in 1951 issued the following statement:

CONSUMER PRICE INDEX FOR MAJOR FUELS
(1935-1939=100)



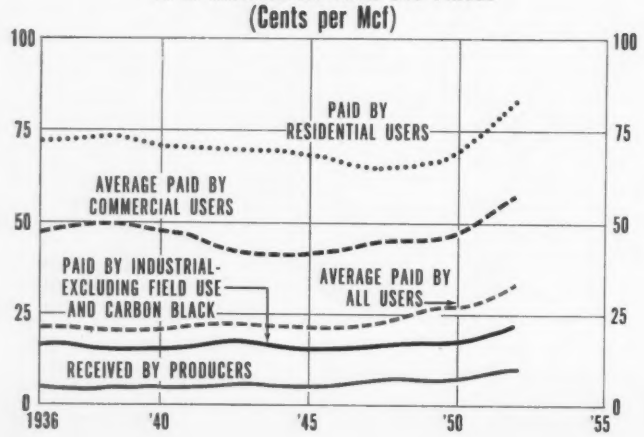
". . . The facts of this case convince us that we have no jurisdiction over Phillips. We find that its operations, so far as relevant, consist of production and gathering, or incidents of or activities related to these functions thus requiring their inclusion within the Act's exemptions."

Further, the Commission found that the sales of natural gas by Phillips, "though technically consummated in interstate commerce," were made during the course of production and gathering. Thus the sale of gas by Phillips was held to be exempt from the Commission's jurisdiction.

This decision was appealed by representatives of consuming interests in the Midwest. The Supreme Court sustained the Circuit Court in holding that Phillips is a natural gas company subject to the jurisdiction of the Commission in making sales at the end of gathering facilities to interstate pipe lines for resale. This decision was made, despite the fact that the Act exempts production or gathering of natural gas from the Commission's jurisdiction.

The Court went further than was necessary to a decision of the case and stated that the Act gave the Commission "jurisdiction over the rates of all wholesales of natural gas in interstate commerce, whether by a pipe line company or not and whether occurring before, during or after transmission by an interstate pipe line company."

U. S. AVERAGE NATURAL GAS PRICES
(Cents per Mcf)



Three Justices vigorously dissented from the holding of the majority. They relied upon the provisions of the Act exempting production and gathering to sustain the Commission's holding that it did not have jurisdiction over Phillips.

In the final analysis, the decision of each individual justice fell according to which provision of the Act he deemed to be dominating.

So—let us look at the reasoning of the five justices who voted the majority decision. "Natural Gas Company" is defined by the Act to mean "a person engaged in the transportation of natural gas in interstate commerce or the sale in interstate commerce of such gas for resale. This language, taken together with the other provisions of the Act, clearly indicated (and had been so interpreted by the Commission) that regulation was authorized only for persons engaged in interstate transportation, and sale for resale in interstate commerce. Such sales are distinguished from the first sale, made by the producer, which may be considered local in nature even though made to someone engaged in interstate commerce. The majority of the Court chose to stand on a literal interpretation of those words ("or the sale in interstate commerce of such gas for resale") without regard for the rest of the Act.

In the view of the majority of the Court, the Phillips Petroleum Company was selling natural gas to interstate pipelines which later sold that gas in other states for resale to ultimate consumers. On this ground, the five justices ruled that Phillips was a "natural gas company," and therefore that the price at which it sold gas was subject to regulation by the Commission. Justice Frankfurter, in a concurring opinion, agreed that the Phillips Company should be regulated in regard to the sale of natural gas, but based his decision upon another reason—that the sale by Phillips fell within the gap intended by Congress to be regulated by the Commission.

Justice Douglas and Justice Clark, speaking also for Justice Burton, voiced strong objections to the majority view. "The fastening of rate regulation on this independent producer brings 'the production or gathering of natural gas' under effective federal control, in spite of the fact that Congress has made that phase of the natural gas business exempt from regulation," wrote Justice Douglas.

Why be concerned over regulation?

Justice Douglas in his dissenting opinion continues:

"The effect of the majority opinion is certain to be profound. The price at which the independent producer can sell his gas determines the price he is able or willing to pay for it (if he buys from other wells). The sales price determines his profits. And his profits and the profits of all the other gatherers whose gas moves into the interstate pipelines have profound effects on the rate of production, the methods of production, the old wells that are continued, the new ones explored, etc. Regulating the price at which the independent producer can sell his gas regulates his business in the most vital way any business can be regulated. That regulation largely nullifies the exemption granted by Congress."

Justice Clark, also dissenting, said:

"Congress provided that the Act 'shall not apply . . . to the production or gathering of natural gas'. Language could not express a clearer command, but the majority

renders this language almost negatory by holding that the rates charged by a wholly independent producer and gatherer may be regulated by the Federal Power Commission. Nor does the Court stop there, for in the sweep of the opinion 'the rates of all wholesalers of natural gas in interstate commerce, whether by pipeline company or not and whether occurring before, during, or after transmission by an interstate pipeline company' are covered under the Act. On its face, this language brings every gas operator, from the smallest producer to the largest pipeline, under federal regulatory control. In so doing, the Court acts contrary to the intention of the Congress, the understanding of the states, and that of the Federal Power Commission itself . . ."

Regulation of the price of gas received by producers is not only unfair; it is unsound economics. The Federal Power Commission itself recognizes that, and understands that there *is* a field price of gas determined by free competition. In rejecting the rate-base method of determining price in the Panhandle Eastern Case, the Commission allowed Panhandle Eastern to attribute the "field" price of gas to production from its own wells. Here was the Commission's reasoning:

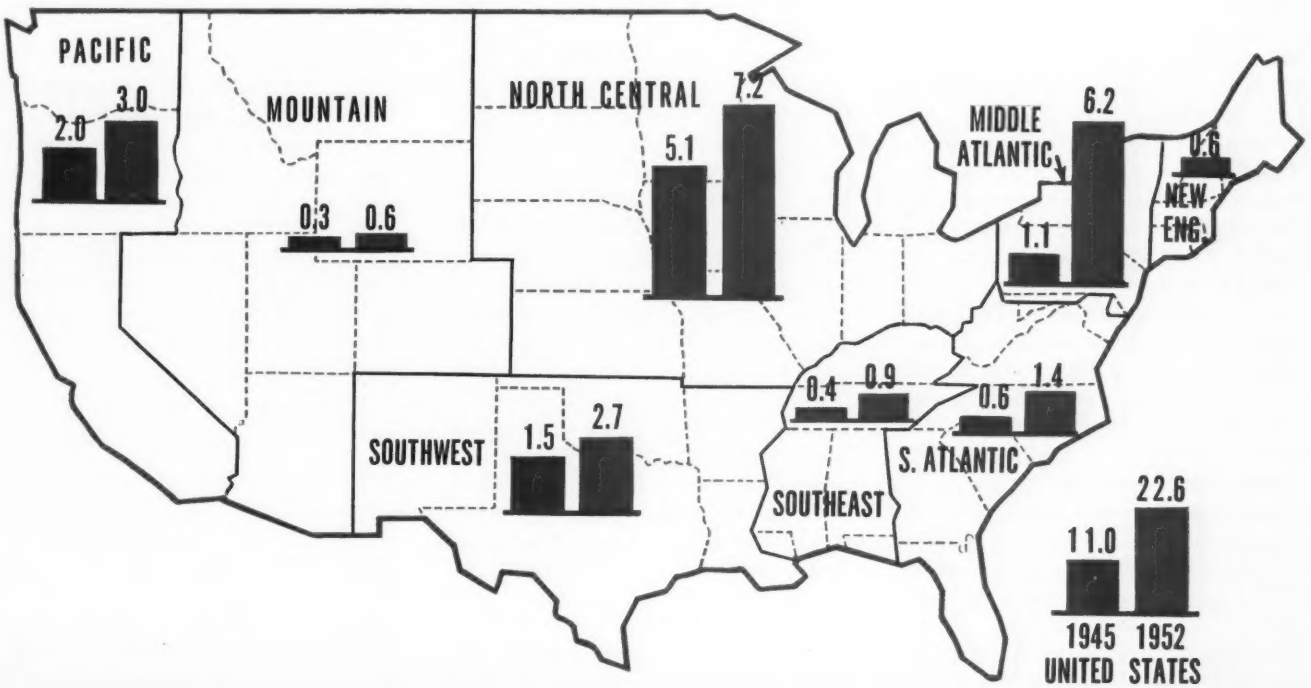
". . . We see no sound reason why we should arbitrarily treat the natural gas of some producers according to a completely different method from that used in the case of natural gas produced by others. Apart from the economic incongruity of such a price situation, there is the fundamental and paramount question, whether such result would be in the public interest, and whether it would even be in the ultimate interest of the consumers who have come to rely increasingly upon natural gas as a major source of their expanding energy requirements. Obviously an arbitrarily depressed price, related to what may truly turn out to be a 'vanishing rate-base,' could tend to both accelerate the consumption and fail to encourage the discovery and development of this limited and irreplaceable natural resource. In other words, it does not promote that conservation in both the production and the use of natural gas which is in the national interest." This statement shows not only why a price determined by supply and demand in a competitive market will serve the interests of consumers better than any artificial price, but also why the Federal Power Commission should not attempt to regulate field prices.

Consumers can continue to be adequately served with natural gas only if Congress acts soon to remove arbitrary federal control over field prices of gas. Otherwise, gas producers will become increasingly reluctant to commit their gas on long-term contract sales to interstate pipe lines. *The Quarterly Review and Investment Survey,* third quarter, 1954, makes that plain when it states:

"The big question confronting the investing public today is, how will the producers act while the matter of regulating their sales is up in the air? . . . looking at the history of the natural gas industry, we can easily gather some idea as to what they are apt to do. There is little doubt that this decision will have a stifling effect on the incentive to commit additional reserves to the public supply by means of long-term contracts . . . We would not be at all surprised if today that attitude found expression in an almost complete refusal of their part to enter into any new contracts for the sale of gas in interstate commerce."

In the public interest, then, corrective legislation by the Congress and approval by the President is needed—and soon.

RESIDENTIAL NATURAL GAS CUSTOMERS BY AREAS
(MILLION CUSTOMERS, INCLUDING USERS OF MIXED GAS)



if CORONADO CAME BACK

IF CORONADO, the Spanish explorer, were to come back to the North Plains of the Texas Panhandle after an absence of four centuries he would see at last *La Gran Quivira,* the mythical land of gold for which he searched so long and fruitlessly.

He would find a great transformation has taken place on the trackless flatlands which threatened to engulf him when he wandered about them in 1541. And even a casual glance around the area would make him wish he had not written: "One sees absolutely nothing about one but the sky and the plains."

The sky above the 26-county Panhandle Plains is probably as blue as it was four centuries ago. And the Plains are still flat and broad. But the horizon which he said "surrounds a man all around at the distance of a musket shot" today is broken by skylines of cities, towers of industrial plants, and trees around farm and ranch homes.

In his writings, Coronado bemoaned the shortage of water on the Plains. Water was so scarce that he sent back most of his expedition to Mexico and kept with him only 30 horsemen in his desperate search for La Gran Quivira. He would then perhaps express disbelief at the bountiful supply of underground water that has been found in the southern portion of the area, and at almost a half million acres which have been placed under irrigation.

Coronado would likely be surprised to learn that the barren plains, which he had marked with "piles of bones and cow dung now and then so that the rear guard could follow the Army," about 75 years ago became the greatest cattle domain in this country. That in this area there was established the famous three-million-acre XIT Ranch. And that to this day large herds of fine cattle are grown on what he considered waste lands.

His eyes would probably bulge at the yellow fields of grain that stretch to the horizon, producing in a normal crop year about two thirds of all the wheat grown in Texas; at the expanses of irrigated cotton (where once he bemoaned the Indians' lack of cotton or other fiber for making clothing); and at the thousands of acres of amber sorghum grains ripening in the sun.

Would he be frightened by the clouds of black smoke billowing from carbon black plants and other industrial installations? He might well be.

And the drone of airliners, streamlined trains, and big trucks, which make Amarillo the area's transportation center, might play havoc with his ears.

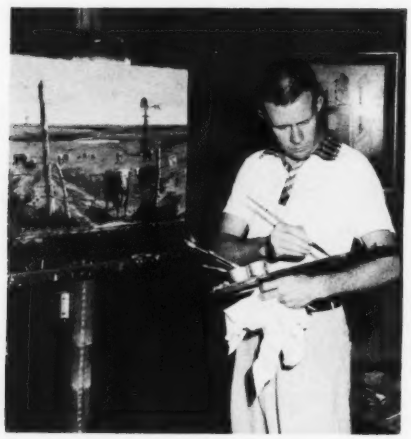
And what might be the reaction of this man, who four centuries ago sought wealth for the Crown of Spain, when he learned of the discovery of large oil, gas, and helium deposits in the area? It is likely he would find it hard to believe that in the area around Pampa and Borger some 8,800 wells produce about 85,000 barrels of crude oil daily; that from these oil wells and from gas wells in the great Panhandle-Hugoton Field some three billion cubic feet of gas is produced daily; and that just outside of Amarillo are gas fields which make this the greatest helium producing area of the world.

Probably, though, his most surprising find would be the people of the North Plains. What he found on his first expedition was lethargic Indian tribes, content to hunt buffalo and live in tents of animal skins. Today he would find people with progress in their eyes, enthusiasm on their lips, confidence in their hearts and an abiding pride in the area and its future. People with the grit to take drouths and dust storms in stride and the humor to scoff at "blue northers"; people with the heart to support Boys' Ranch, a haven for homeless boys; people who speak of the area as *The Golden Spread;* people who have brought prosperity to the North Plains and have the courage to dream of a still greater empire.

"La Gran Quivira, indeed!" might well be Coronado's exclamation on his return visit.

Wheat & Chemicals In normal crop years the North Plains area produces about two-thirds of the total Texas wheat crop. Though the area is known as a part of the nation's bread basket, the sight of a refinery, chemical plant, or other industrial installation blooming right up out of a field of grain has become quite commonplace. The area now has three refineries, three petrochemical, 20 gasoline, 18 carbon black, and other industrial plants.

THE NORTH PLAINS *offer color and variety to Humble Way artist*



Shackelford at work on cover painting.

THAT portion of the Texas Panhandle known as the North Plains covers 26 counties. Generally the area is a vast flat plateau, but there are portions of it where streams have cut gorges and canyons; others where rolling hills relieve tableland monotony.

Into the North Plains area The Humble Way sent Houston artist George Shackelford in search of material for this series of paintings. He roamed from the Oklahoma line to the New Mexico line; from Plainview to Dalhart, sketching and photographing scenes. From his brushes comes this cross section spring-and-summer report. Some of his paintings reflect the dusty drouth of early spring; some the verdance and bloom that followed early summer rains. (See lush pasture shown in cover painting.)

Shackelford is a 36-year-old native Texan. He received his art training at Cape Cod, Massachusetts, at Saratoga, Florida, and at Houston's Museum of Fine Arts. He teaches art at the University of Houston and in his own studio. He is best known for his portraits and his industrial paintings, some of which are hung in private collections. He has won a number of local awards in recent years.

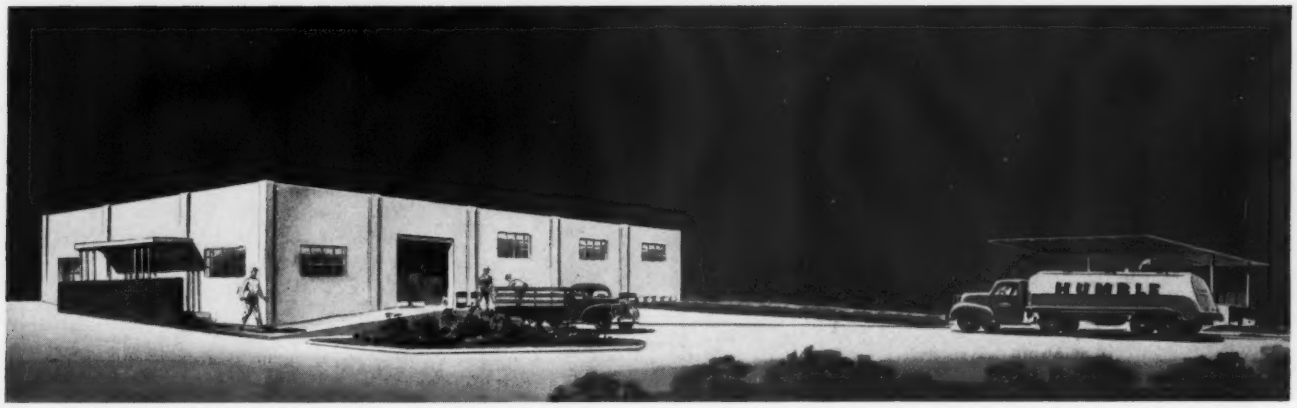
The Lighthouse

Carbon Black Most of the nation's supply of carbon black used in the manufacture of tires, printing inks, paints, and phonograph records is made in plants in the North Plains area. Though there has been some decline in the number of plants in recent years, heavy black smoke still is bulging regularly from 18 such plants.

In Palo Duro Canyon, south of Amarillo, the Lighthouse is one of the outstanding formations in an area that is considered a geologic wonderland. Rugged, colorful formations abound in the 120-mile long canyon. Greatest depth of the canyon is 1,120 feet, and its sheer walls are reputed to offer geologists 300 million years of earth development study. In addition to affording an outdoor classroom for geologic and archeological study, the canyon also has historical significance: it served as grazing ground and natural corral for Indian horses; in 1876 it became headquarters and grazing land for the Panhandle's first big ranch, that of Charles Goodnight, pioneer cattleman. Today the canyon attracts many tourists.

Landmark This old ranch house stands as a landmark of another era—when cattlemen used Buffalo Springs as a watering place. The natural spring here was known to Indians and to the herds of buffalo that roamed the Panhandle before the ranchers came. A stone marks the site of the famous springs, and the old house is being maintained.

Water Ever since white men first crossed the Plains lack of water has caused difficulties. During the early ranching days it was one of the major problems. But in recent years water wells have been sent down to tap a rich supply, and today almost ½ million of the state's four-million-plus acres equipped for irrigation are in the North Plains area.



Artist's conception of Humble's warehouse and truck loading facilities now under construction in Amarillo. From this bulk station-terminal, tank trucks will serve Humble's expanding retail outlets in the North Plains.

HUMBLE SERVICE IN THE NORTH PLAINS

INTO the expanding North Plains area of the Texas Panhandle, Humble Oil & Refining Company extended its marketing operations with the official opening of two service stations in Amarillo on Saturday, August 7.

Public response was "gratifying," according to Sales officials. At both stations driveway salesmen were busy all day and into the night, servicing cars for people who expressed appreciation for Humble's coming to the North Plains.

Two more stations are now under construction in Amarillo, and ground has been broken for a bulk station-truck terminal.

Future plans are to make quality Humble products and service available to motorists in communities on all of the main highways in the area.

For many years Humble's retail marketing operations had been carried on in all parts of Texas except the Panhandle and the far western sector beyond the Pecos River. Beginning in late 1945 Humble's Sales Department embarked on a program of expansion. Retail and wholesale outlets were increased rapidly in the heavily populated parts of the state, and the program was supported by advertising, sales promotion, and training. By 1951 this effort had shown good results; Humble had progressed from fifth place among Texas marketers to first place.

Having attained a position of leadership, the decision was made to undertake expansion of operations into the Panhandle, where Humble had long conducted exploration, production and pipe line activities. Humble Pipe Line Company extended its lines into the area in 1926, and over the years has afforded producers a fair and equitable outlet for millions of barrels of crude oil. Exploration and drilling activities have been conducted out of the district office at Pampa.

South Plains marketing activities were started with a bulk plant and several retail outlets in Lubbock. Success of that venture led to gradual expansion into other communities in the South Plains. Good public acceptance here, coupled with letters and cards from car owners asking for Humble service in the North Plains, supported the decision in late 1953 to extend marketing operations northward.

"The fine response to the recent opening of our first service stations in Amarillo is another indication that Texas motorists recognize the outstanding quality of Humble products and appreciate the high standards of service they receive at Humble stations. We will strive always to merit their confidence and patronage," said Sales Manager F. A. Watts.

Busy driveways were the order of the day when Humble's first two stations were opened in Amarillo recently. Left, Dealer W. C. Rogers' station at West 10th Avenue and Lipscomb; right, Agent Cecil Hunter's at East 10th Avenue and Osage.

Engineer and industrial hygienist at Baytown collaborate in checking noise levels in the room where motor oils are canned.

STOP THAT NOISE!

Reducing noise is part of the effort to provide the best possible working conditions at Baytown Refinery

WHETHER vibrations that assail our ears are *sounds* or *noises* depends on how they affect us. Ice tinkling in a frosty lemonade . . . the cheery crackle of a campfire . . . the clink of coins in our pockets—these are pleasant sounds. But we may be sent into a wrathful frenzy by the buzz of a persistent mosquito, or the loud wassail of a wee-hours party upstairs. These we angrily classify as noises.

All of us learn to live with some occupational noise. The tired young housewife knows by its cry whether an infant is hungry or in pain. The stenographer is almost unaware of her typewriter's clatter. The steady banging of a steam hammer is less distracting to its operator than to the office worker across the street.

Baytown Refinery, like all industrial plants, has its own orchestra of sounds and employees are accustomed to them. Vapors sing their strident way through flow lines. Empty cans bang together as they make their way endlessly along conveyor belts. Gas flames roar throatily and powerfully in huge furnaces. Steam blasts its way out the open ends of pipes.

In most cases, there is nothing unduly distracting or disturbing about refinery noises. One gets used to them, is even comforted by them, as by the presence of an old acquaintance. But some individual noises may occasionally rise above the level where they can be comfortably tolerated. When that happens, Baytown specialists in noise control (a team consisting of an engineer and an industrial hygienist) try to do something about it. Basically, their work is just part of trying to provide the best possible working conditions within the plant.

Not long ago, for example, two flow lines at the newly built Deasphalting Plant were setting up an unearthly vibration. Vapor under pressure, passing through control valves, caused the lines to vibrate, creating sounds that one man described as "a siren in a washtub."

The solution in the case of the shrieking lines was to make a change in the control valves. By shifting from one type of valve plug to another, the vapors were made to flow in a smoother, less turbulent stream. The two lines lost their neurotic wails and became peaceful citizens.

Then there was the roaring noise to contend with at one of the rubber plant furnaces. This was caused by the flow of air to the burners and combustion at the burners. Noise control specialists literally trapped that noise. They installed a "sound trap" consisting of a box lined with a sound-absorbing material and a series of sound-absorbing baffles placed in the air stream parallel to the flow of air to the burners. Viewed from one angle, the contraption looks much like an egg crate. Placed over the noisy area

like closing a door, it muted the roaring lion down to a docile lamb.

A similar type of control was used around some steam vents at the same rubber plant. Like silencers on a rifle, these were steel shells lined with a sound-absorbing material, with baffles placed parallel to the steam flow. Once in place around the vent pipes, these silencers quieted the roaring blasts of escaping steam. As the specialists explain it, they subdue noise by changing the form of energy from noise energy to heat energy. The area grows just a bit hotter—and much quieter.

Down at the building refinery men call the Compound—where lubricating oils and other materials are canned—employees have been having a bit of trouble with noise. First, there is the matter of empty cans coming from boxcars into the Compound building. After they enter the building, the cans are automatically upended and noisily blasted with a jet of air, to remove any possible dust or other material. Then, on a conveyor enroute to filling machines, the cans clatter together like those traditionally tied to a newlywed's car. The critical points are those where the conveyor changes course and where the cans enter the filling machine.

These noise spots will be corrected, the experts say, by providing at the critical points metal covers lined with an insulating material. In short, they intend to put the noise under cover. In addition, they will line the ceiling with a sound-absorbing material, to cut down general noise in the building, and place a metal "sound shield" between the machine and the operator.

Besides the work at the Compound, additional noise-reducing work is contemplated or being planned within the refinery. Those who do the work use as their "noise detective" a sound level meter and a noise analyzer. These show them the noise level and the kind of noise. Using the instruments, they take readings or ratings numerically and compare those readings with readings taken at other places.

It will never be possible to make Baytown Refinery, or any other working place, as quiet as the public library or one's own living room after the children have gone to bed. But the noise-hunting-and-correcting team at Baytown Refinery is doing what it can to ferret out and reduce the worst spots to a workable, livable level.

Placed around steam vents like silencers on giant guns, these large tubular devices at a Baytown plant have quieted steam which formerly escaped with a blasting roar.

Water tender at a Baytown boilerhouse inspects fiber glass noise insulation on one of the sound boxes recently installed to subdue noise at the unit's furnace burners.

Along the Neches, amid the lush greenery of a river bottom, a drilling rig stands as a symbol of the hunt for new oil. It took some 20 years of searching, in an area ringed with dry holes, to find this new field in the East Texas Basin.

How To Find An Oil Field

This is the story of a question . . . and of an answer in the form of a field that took 20 years to find

"WITH the odds so forbidding," a visitor from abroad recently asked, "with eight out of nine wildcats statistically doomed to be dry holes, isn't it somewhat amazing that you Americans keep on finding so much new oil?"

He had a point. The road to success in the oil business crosses a no-man's land that is sieved with dry holes. Of the million and a half wells drilled in the United States since Colonel Drake spudded in a great new industry, more than 370,000 have been as dry as the proverbial bone. Even in proven areas, one well out of four fails to find oil.

"That sort of ratio," the visitor continued, "must call for venturing large sums of money—and with the almost certain prospect that much of that money will be lost. How can you afford to keep up the pace?"

He had another point. Inexorably, the overall bill for the petroleum industry's needle-in-a-haystack search adds up to a staggering figure. And it is a figure that continues to mount as the needles become fewer in number and thus harder to find.

Last year, for instance, the industry spent more than $400 million on geophysical exploration alone. It drilled 6925 wildcats, and 6151 of them were dry. On the average, estimates the American Petroleum Institute, each of these exploratory wells put a $100,000 dint in some wildcatter's pocketbook. The deep tests (those beyond 10,000 feet) cost even more. Just a few weeks ago, one company risked a million dollars on an offshore well only to net an underwater duster.

Yet each day new oil fields continue to be found in America—more than two-thirds of them by independent operators.

What's the secret?

Actually, oilmen admit, there is none. We Americans have neither a monopoly of the necessary technical knowledge nor an overly large share of areas believed favorable for the accumulation of petroleum deposits.

The real answer, they say, may be found in the two factors that have always been distinguishing characteristics of the American method of oil-finding. One is *the multiple effort system,*

which permits literally thousands of companies and individuals to enter the search for oil. The other is *percentage depletion,* a provision in our tax laws which recognizes the hazardous nature of the business and which fairly provides, for the national good, a reasonable incentive.

Third Time Charm

Up in East Texas, on a wooded and hilly tract that sprawls across some 15 square miles of river bottom land, is a case in point—a new oil field. You might call it the kind of field wildcatters dream about.

It is a fairly large one as present day discoveries go, with the productive area estimated to be 9500 acres. The company that brought it in—Humble, in this case—has over 96 per cent of the estimated productive acreage under lease. And the prospects are excellent that, with care and a bit of luck, the drilling record during its development will show an unusually high percentage of successful wells.

On the face of it, the Neches Oil Field, as this newcomer to the East Texas Basin is called, might seem to be one of those pieces of cake upon which the oil industry is popularly supposed to thrive.

In reality, it is the end product of more than 20 years of persistent effort—of the expenditure of large quantities of risk capital, of patient grubbing for subsurface information, and of a narrowing circle of dry holes. It is one of the more dramatic examples of the results to be achieved through multiple effort and a valid incentive.

Supplies are essential to the quest. This warehouse office, with its neatly racked pipe, is part of the "staging area" for Humble's operations in the Neches Oil Field.

There are several unusual facets to the Neches Field. For one thing, its size makes it not only Humble's most important discovery of 1953 but also one of the larger finds for the year in the entire nation. By way of contrast, more than 500 of last year's 774 new oil fields discovered reservoirs initially rated at *less than a million barrels each.*

But what makes Neches even more unusual—from the lay viewpoint, at least — is the fact that it was ever discovered at all.

For this potato-shaped field (see map), raggedly sliced in two by the Neches River where that stream divides Anderson and Cherokee counties, lies in "old" oil country. It is in the East Texas Basin, one of the most thoroughly explored oil areas in the world.

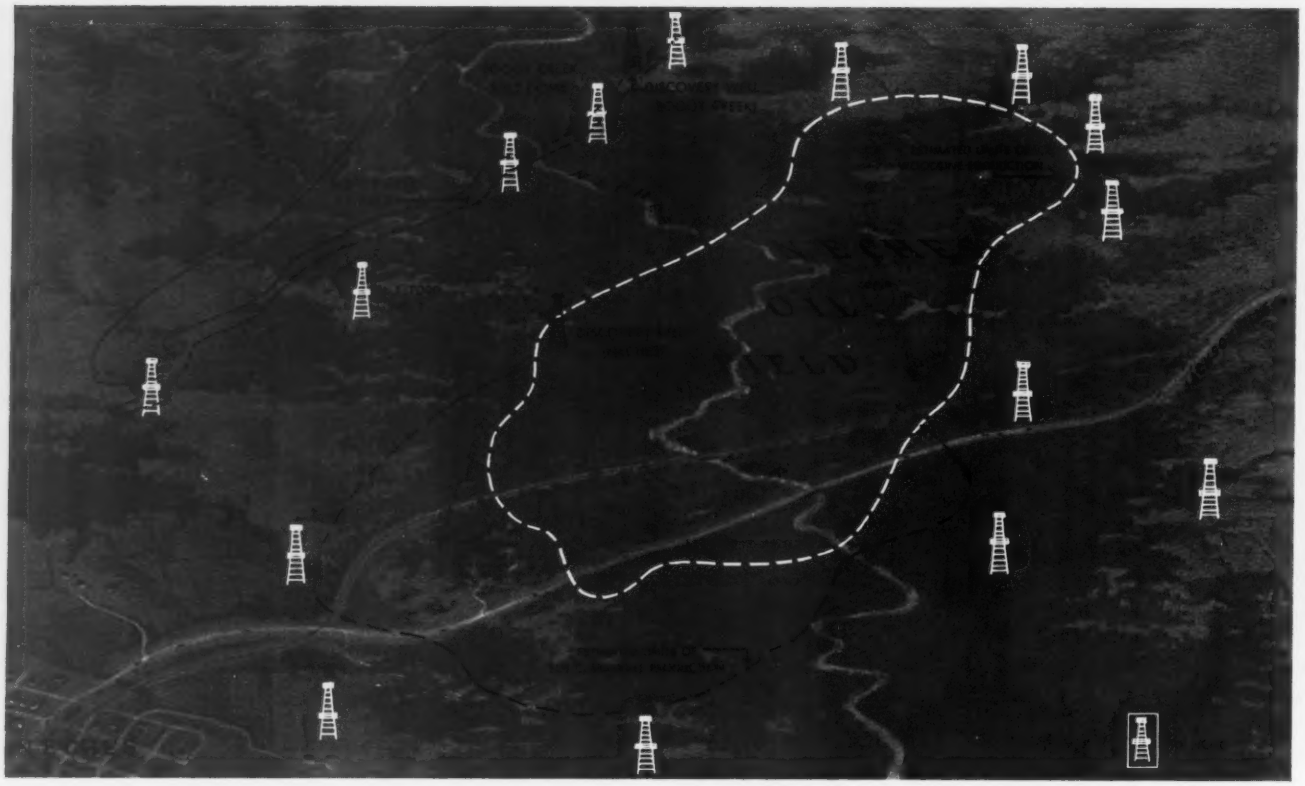
Just a mile and a half away is Boggy Creek, a small but historic field (and another Humble discovery) which set off a flurry of drilling back in 1927 but which produced nothing but dry holes on every stepout in the direction of what is now the Neches Oil Field. More dry holes, drilled farther to the south and east by other operators, flank another large segment of the new field's perimeter.

But oil is where you find it. A dry hole, instead of bringing things to a halt, sometimes provides a clue that encourages one to keep searching. In the light of other information, from geologic and geophysical sources, it can be like a hydrocarbon mirage which

Old Boggy Creek, now showing its age, helped blaze a historic geologic trail.

Division superintendent checks off on map the dry holes that led to Neches.

Beyond the dry-hole barrier, drilling proceeds apace—one well to 40 acres.



This is an artist's impression of "the field that dry holes found." Only four of Boggy Creek's 41 dusters are indicated. While Neches is predominantly a Woodbine field, another sand, the Sub-Clarksville, is also productive along the lower end.

keeps beckoning and beckoning. *Don't quit now,* it seems to say. *Move a little farther this way or that. There's oil just over the horizon.* And sometimes there is.

Three times, counting its Boggy Creek stepouts, Humble staked time and money on wildcat tests in an effort to find more oil along the Neches River bottom. In between, surface geologists mapped the area to try to find a possible "high," a condition in the subsurface beds that might be favorable for the accumulation of oil. Seismograph crews gave the area a going-over. Oil-finding specialists studied results from dry holes drilled by others, hoping to spot a bit of information which might help pin-point the suspected reservoir.

And it all paid off on the third try. On August 6, 1953, Humble spudded in its Northeast Neches Oil Unit No. 1, with an intended depth of 11,000 feet. On September 10, when down only a little more than 4700 feet, it brought in a flowing well in the Woodbine formation—the discovery well of the Neches Oil Field.

Nearby, old Boggy Creek, long past its heyday, drowsed in the sun. But as the first Woodbine discovery east of the famed Mexia fault zone, as the field which thus opened up the great oil province of East Texas, Boggy Creek once again had good cause to glow with pride.

The Long Way Round

From Boggy Creek to Neches is only about 7000 feet as a river bottom mosquito flies. Yet it took 26 years to move that short distance and to break through the dry hole barrier which so effectively separates the two fields. Why so long?

The story of Boggy Creek itself offers a hint as to the reason. This small 215-acre field stretched thinly along the southeast flank of a snowshoe-shaped salt dome. As the first (and still the only) interior salt dome in East Texas to produce oil, it raised high hopes when first discovered in the spring of 1927. From the drilling standpoint, though, it turned out to be a tough nut to crack. Its productive width, in many parts of the field, was less than that of a football gridiron.

Eighty wells were drilled at that time in and around the Boggy Creek field. Of these, *more than half* (41) were dry holes! That was enough to check the bounding enthusiasm for further exploratory drilling in the immediate area.

Boggy Creek, in short, was a rousing success every way except financially. Until then, many operators had taken a dim view of the area because the Woodbine was deeper there (and hence thought to be less favorable for the accumulation of oil) than in the fault fields to the west. Boggy Creek signaled the beginning of an extensive wildcatting campaign in other parts of East Texas, leading in short order

Discovery well, now marked by stenciled sign, found oil near the field's edge.

to the discovery of Van and, eventually, to the giant East Texas Field.

Humble, however, barely broke even on the field. By 1940, when the Company sold its producing wells at Boggy Creek (while retaining all mineral rights below the Woodbine), it had averaged less than 60,000 barrels of oil for each of the 80 wells drilled. At the prices prevailing at the time, this was hardly more than enough to absorb the $1,290,000 the Company lost on its *non-producing* leases.

Never Quit Trying

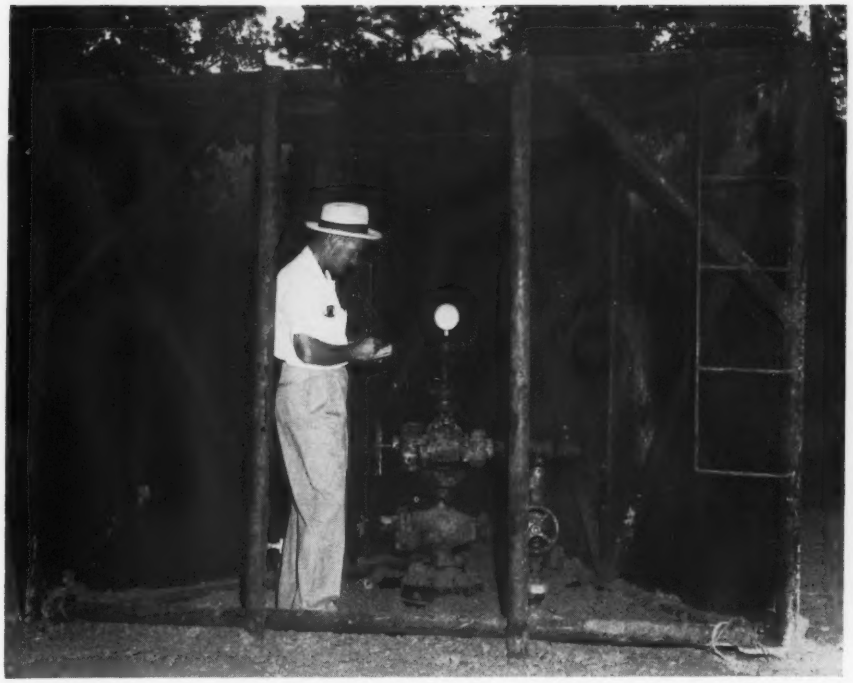
Nevertheless, Humble did not give up on the area. In 1934, its surface geologists found indications of a possible high east of Boggy Creek. This fanned the Company's interest, but did not provide a strong enough basis for drilling another wildcat so close to Boggy Creek.

It was then that the "multiple effort" mentioned before came into play to help find the Neches Field. In some cases, and at considerable expense, Humble had drilled dry holes which had contributed geologic knowledge leading to the successful development of oil fields by other companies. This time it was the other way around.

In 1941, another company staked out a wildcat about five miles southeast of Boggy Creek. This company went to the Woodbine and got a dry hole, but the information from this well again indicated to Humble that a possible high lay over toward Boggy Creek. Limited seismic work, carried on by Humble in February of 1944, supported this thesis.

Surprisingly, though, the other company moved *in the opposite direction* when it tried a second wildcat. It had apparently derived a different interpretation from the first dry hole. This company's second test was about two miles farther east. It too probed to the Woodbine, with no shows of oil or gas. And once more Humble read the results as indicating even more strongly that there was a high over toward Boggy Creek.

Farm boss uses roadside telephone to check with district office at Athens.



Over half the wells in Neches Field are in river bottom area that is vulnerable to floods. This steel guard is designed to deflect logs and debris in time of flood.

Humble then decided to try a wildcat of its own. Having retained all rights below the Woodbine in its Boggy Creek lease block, it undertook to test the deep flank of the salt dome. In August of 1945, it spudded in the W. T. Todd No. 1 about 1700 feet east of Boggy Creek. It drilled to 12,269 feet and then abandoned the well as a duster. This dry hole, though, was the real turning point in the search for the Neches Field. It yielded subsurface clues which suggested that it would be a good bet to try a little farther to the east.

On the strength of this information, plus favorable reports from more seismograph work, Humble began in earnest to expand its lease block. This took time. Ironically, much of what is now the northwestern corner of the Neches Field had once been under lease to Humble. The parade of dry holes along the edge of Boggy Creek had caused the Company to drop most of these leases. Rebuilding the block, and adding to it, took eight long years.

Not until late summer of 1953, when its leasing campaign was nearing its final stage, did Humble spud in the well which was to discover the Neches Oil Field.

By then, other operators had drilled four more dry holes along the lower edges of Humble's lease block of some 10,000 acres. Within a few months of the field's discovery, still other operators had drilled four more dry holes along the northern boundary. All of these dry holes helped define the productive limits of the field.

Thus it was that it took more than 20 years to find just one oil field—a field that lay in the shadow of another.

In a way, perhaps, Neches might be called the field that dry holes found. But without percentage depletion, which permits profits from successful ventures to help cover losses from ill-starred projects, and without the multiple effort of many operators seeking the same goal, these dry holes might never have been drilled.

All in all, it is these two great economic forces which furnish the real answer to the question of how we keep on finding new oil fields. To that, the story of Neches strongly attests.

They have retired

Fourteen employees, all with more than 26 years of service, join the ranks of Humble's annuitants

Fifteen long-time employees of the Humble Companies became annuitants during a two-months' period between May 20 and July 19. Fourteen members of this group have more than 26 years of service. William N. Finnegan, executive assistant in the Houston Office, heads the group in length of service with more than 34 years.

Basic information on the individual's Company career is given below in the following order: Name, job title and location, date of retirement, and number of years' service.

HUMBLE PIPE LINE COMPANY

DANIEL B. COMPTON, engineer at Harbor Island, July 12—more than 26 years. Mr. Compton will spend a lot of his retirement time raising cattle on his ranch near Henderson in Rusk County; he will maintain his home in Aransas Pass, however. He began work with Humble at Texas City as a pipe liner. Later he moved to Ingleside and then to Harbor Island. During the war years, April, 1942, to April, 1945, he worked as a special watchman.

AUSTIN L. ROBERSON, oiler at Longview, June 8—more than 28 years. He went to work for Humble as a groundman. He has also worked at Groesbeck as a laborer; at Comyn, Bruni, Thompsonville, Corsicana, and Pendell as a line walker; and at Groesbeck as pipe liner. Mr. Roberson has been married 28 years to the former Lillian Pool. They have five children and three grandchildren.

JAMES D. WHITCOMB, district chief clerk in East Texas Division, July 15—more than 31 years. Mr. Whitcomb has worked at Hawkins, Hull, and Mexia for the Company. Gardening and music are among his hobbies, and he likes to play badminton to stay in physical shape. He has bought a home next door to his daughter in Georgetown, Texas, where he plans to follow his hobbies and enjoy his grandchildren during retirement.

CHARLES O. HEMMENWAY, stock gauger at Baytown, July 11—more than 26 years. Mr. Hemmenway was employed at Goose Creek as a laborer. Later he worked as gauger, line walker, and stock gauger. He owns a home on 6 acres near Cedar Bayou, where he will live and spend his time gardening and raising chickens.

WALTER R. MCTEE, engineer at Bateman Station, May 30—more than 27 years. Gardening is his special interest. He owns three acres of land near Odessa, where he plans to build a home. He will also look after a farm at Whiteface, Texas, and do lots of gardening during retirement. Mr. McTee began his Company career at Nocona as a laborer. Later he worked in various capacities at Arp, London, Holt, Longview, and Bateman.

PRODUCTION DEPARTMENT

RUFUS H. MILLARD, lease pumper-gauger at London District, July 19—more than 28 years. Mr. Millard expects to build on a 5-acre tract near Crim's Chapel ten miles north of Henderson after retiring. At any rate, he plans to do a lot of fishing. He was employed as a pumper at Holliday. He has been stationed at London since 1931; he has been a lease pumper-gauger since 1939.

BLEDSOE B. HOOD, carpenter at Maurbro, May 20—more than 32 years. Mr. Hood was a member of a winning first aid team in 1934 that made a trip to Tulsa, Oklahoma. He also won a watch in first aid competition. Mr. Hood started with the Company at Baytown Refinery but later transferred to Production and worked at Sugarland, Anahuac, and Maurbro. He owns two and a half acres and a home south of Edna, Texas, where he plans to pursue his hobbies of gardening, hunting, and fishing.

WILLIAM THIEBAUD, district superintendent at Pampa, May 20—more than 33 years. Mr. Thiebaud plans to travel in the United States and Europe during retirement. He is particularly interested in the mountainous country of Switzerland, the home of his parents. He worked for the Company as roustabout, derrickman, gangpusher, tool dresser, tool pusher, assistant district superintendent, and district superintendent.

BAYTOWN REFINERY

SAM LEWIS, laborer in Cracking Coils, July 5—almost 32 years. He will make a trip to California to visit his children and then return to his home in Baytown shortly after retiring. He worked in the Labor Department from July 25, 1922, to October 8, 1923, then resigned, and later returned to this same department. He transferred to the Cracking Coils in 1945. Mr. Lewis likes reading as a hobby.

TOM M. CLARK, helper, May 26—more than 25 years. He joined the Refinery in the Labor Department as a laborer. In 1928, he transferred to the Pumping and Gauging Department as a repairman helper. Since then, he has been a member of this department serving in various capacities. He is a sports fan, his favorite sport being football. He will maintain his home in Baytown, but he hopes to travel some in the United States.

ROBERT A. HOOPER, operator, May 26—more than 26 years. Mr. Hooper plans to spend some time traveling in the western United States, Canada, and Mexico immediately after retiring. He began his employment with Humble at Breckenridge in the Development Division. In August, 1929, he transferred to Baytown Refinery as a shift foreman in

the HP Laboratory. He became an operator in the Hydroformer Unit on July 10, 1944.

THOMAS S. KING, department head, May 22—more than 33 years. Mr. King started with the Refinery as an assistant electrical engineer in the Electric Department. He became general foreman of the Electric group in the Utilities Department in March, 1940, and department head of Operations Utilities on January 1, 1946. Golf, bowling and fishing are his special interests and he hopes to participate in them more now that he has the time.

HOUSTON OFFICE

WILLIAM N. FINNEGAN, executive assistant, July 1—more than 34 years. Mr. Finnegan joined Humble in one of its engineering groups in 1919. He became executive assistant in charge of press relations in 1942. In 1948, he was named chairman of the Company's Public Relations Committee. He served two terms as president of the Humble Club in 1927 and 1943. Prior to his retirement, he had been on a year's leave of absence.

WILLIAM D. FONTAINE, JR., synopsis clerk in Land Records and Rentals, July 14—more than 31 years. Mr. Fontaine began work with Humble as a clerk in Production Accounting; later he transferred to the Sales Department. He acquired a law degree and license while working with Humble. For the past 10 years, he has worked in Land Records and Rentals Division, where he put his legal training into practice in analysis of leases and other legal instruments for the Company. For a short while beginning in February, 1943, he was loaned by Humble to the Defense Plant Corporation. He likes golf for recreation and shoots in the 70's. Other interests include reading and working with the Arabia Shrine Crippled Children's Clinic and other Masonic groups. He will spend his time on these special interests and do some traveling during retirement.

GEORGE C. PALMER, special officer in the Law Department, July 13—more than 16 years. He joined Humble in 1936 as a special watchman in the Marine Department. He worked at Baytown and Galveston until May, 1938, when he transferred to the Refining Department as head of Plant Protection at Ingleside Refinery. When that refinery was closed in 1946, he came to Houston as a special officer. Mr. Palmer is a member of the Multiple Sclerosis Society of Houston.

Employees Recently Returned From Military Service

AIR FORCE

Lewis C. Orsak	Katy Gas Cycling Plant
Thomas L. Stevens	Conroe, Production

ARMY

James H. Adams	Exploration Geophysics, Texas
Frank H. Broz	Exploration Geologic, Houston
Parris J. Caldwell	Baytown Refinery
Robert L. Cox	Friendswood, Production
Leo A. Davis	Means, Production
Raymond G. Dethlefsen	Pipe Line Accounting, Houston
Robert W. Ewing	Baytown Refinery
David S. Goddard	Katy Gas Cycling Plant
Ollie D. Hakemack	Katy Gas Cycling Plant
Jessie T. Hensarling	Production Accounting, Houston
Robert J. Hoke	Goose Creek, Production
Billy J. McFarland	Printing & Reproduction, Houston
Billy G. Sissom	Tom O'Connor Gas Plant
Otis W. Young	Grand Isle, Production

COAST GUARD

Charles C. Hamor	Sales Construction Engineering
John R. Steib	Paradis, Production

MARINES

George E. Blakely	Exploration Geophysics, Texas
Pat H. Crowhurst	Baytown Refinery
James R. Gipson	Tomball, Production
Billy J. Martin	Katy Gas Cycling Plant

NAVY

Robert H. Barclift	Gulf Coast Div.
Barney E. Dosier, Jr.	Crude Oil Accounting, Houston
Melvin T. Franks	Odessa, Production
Walter L. Jolly, Jr.	Baytown Refinery
William Pate	Exploration Geologic, West Texas
Herman A. Samuel	Baytown Refinery
Sylvester M. Shelton	Exploration Geophysics, Texas
Felix A. Timmons	Baytown Refinery

Employees Recently Called to Military Service

AIR FORCE

Edwar R. Allen, Jr.,	P.L.-Engineering, Houston

ARMY

George B. Benson	Anahuac Gas Plant
Russell J. Bruno	Avery Island, Production
Donald P. Harlan	North Texas Division Office
Robert J. Lehew	P.L.-Proration & Statistical, Houston
Johnny E. Zlomke	Baytown Refinery

NAVY

Harry R. Hanson	P.L.-Engineering, Houston
James T. Lockhart	Printing & Reproduction, Houston

Deaths

During the past two months, nine active employees and 10 annuitants have died.

Active employees who have died are: Charles A. Durham, 43, assistant division geologist in Southwest Texas Division, on June 26; William C. Hopper, 50, process coordination clerk at Baytown Refinery, on August 6; Andrew C. Kitzman, 54, pipe liner at Baytown, on June 9; William J. McDougal, Sr., 60, gas plant superintendent at Heyser Gas Plant, on June 29.

Cecil R. Moffitt, 55, handy repairman at Baytown Refinery, on June 8; Alvin G. Smith, 53, boilermaker first at Baytown Refinery, on June 30; William B. Tom, Sr., 52, engineer at Whitsett Station, on July 24; Claude A. Towns, 49, pipe liner at Tomball Connection, on July 26; Otto G. Wappler, 59, witness gauger at Gladewater, on August 4.

Annuitants: Manuel J. J. Belandran, 69, laborer at Baytown Refinery before his retirement, died on June 7; Frank D. Helton, 62, senior supervisory accountant in the Houston Office before his retirement, died June 22; Daniel D. Hoffman, 50, engineer at Hastings station before his retirement, died July 16; Joseph J. Hughes, 79, pipe liner at Kemper Station before his retirement, died July 5; Walter B. James, 58, pumper at Baytown Refinery before his retirement, died June 19.

Frank Jousan, Jr., 65, lease pumper-gauger at Galveston Bay before his retirement, died July 28; Robert L. Lawless, 67, dockman at Baytown Refinery, before his retirement, died July 26; Charles Richeson, 68, field engineer at London District before his retirement, died July 16; Maxey T. Ward, Sr., 65, pipe fitter first class at Baytown Refinery before his retirement, died on June 22; Wilmer E. Burch, Sr., 67, stillman first at Baytown Refinery before his retirement, died July 7.

By the way . . .

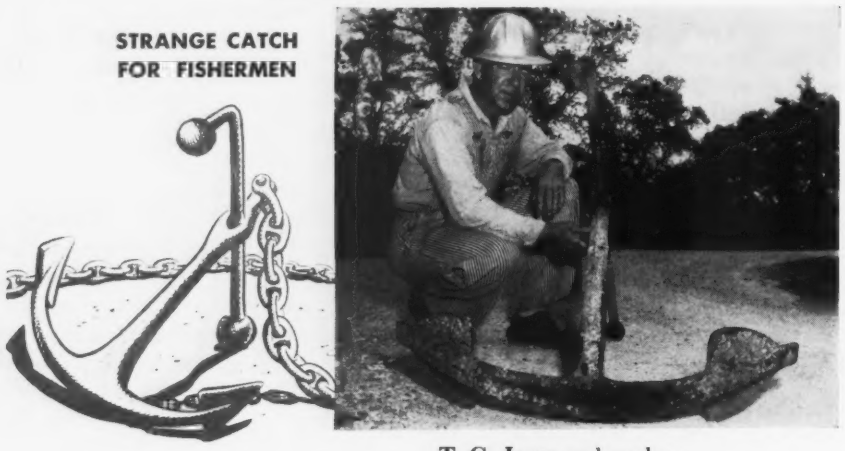
HUMBLE NAMED BEST MANAGED COMPANY

The June, 1954, issue of *The Corporate Director,* published by the American Institute of Management, carried a list of 34 companies, each named by the Institute as the best managed in its industry. Humble Oil & Refining Company was named the best managed company in the "petroleum and coal products" group.

For many years, the American Institute of Management has applied "rational and coordinated tests" to determine the individual management of thousands of America's industrial and other corporations. These tests are concerned with such factors as health of earnings growth, fairness to stockholders, fiscal policies, production efficiency, and sales vigor.

Other companies cited include General Motors, E. I. du Pont de Nemours, Procter & Gamble, American Telephone and Telegraph.

STRANGE CATCH FOR FISHERMEN



T. G. Jones and anchor

H. J. Braun, gauger in Humble's West Ranch Field, is an ardent fisherman and a careful reader of THE HUMBLE WAY. He has put those two hobbies together in a manner to intrigue anyone interested in Texas history.

One day, fishing in Lavaca Bay near the mouth of the Lavaca River, Mr. Braun and his companions caught something they couldn't eat. In the boat with him were T. G. Jones and J. Z. Reeves, gaugers at West Ranch, and J. W. Fowler, now gangpusher at Hardin. It took all four men to pull in their catch—an old and rusted anchor, encrusted with barnacles!

The fishermen carried their prize home and might have forgotten the incident, but for a story in THE HUMBLE WAY. When Mr. Braun came to the end of "The Texas Navy" article in the last issue, he was startled by the artist's sketch of an old anchor (drawn from an illustration in an old book of ships). It was exactly like the anchor he and his friends had found—down to the last detail!

Might their catch be an anchor from one of the Texas or Mexican warships . . . or lost there by La Salle, or by an early Spanish navigator? It might be, Mr. Braun reasoned. Many such ships had plied these very waters in earlier days.

What do *you* think?

Helicopter Service Extended

Since the recent HUMBLE WAY article about the use of helicopters to fly crewmen to offshore drilling platforms, Humble's "flying ferry service" has been greatly extended.

Two seven-passenger helicopters are now flying crews to all five rigs operating in the offshore area of the Grand Isle District. The two whirlybirds now average 12 round trips to rigs per day in six hours and 15 minutes of flying time with 110 passengers.

The Grand Isle offshore drilling program will soon be expanded to seven rigs, requiring a helicopter schedule of up to 25 round trips per day.

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P. O. Box 2180, HOUSTON 1, TEXAS

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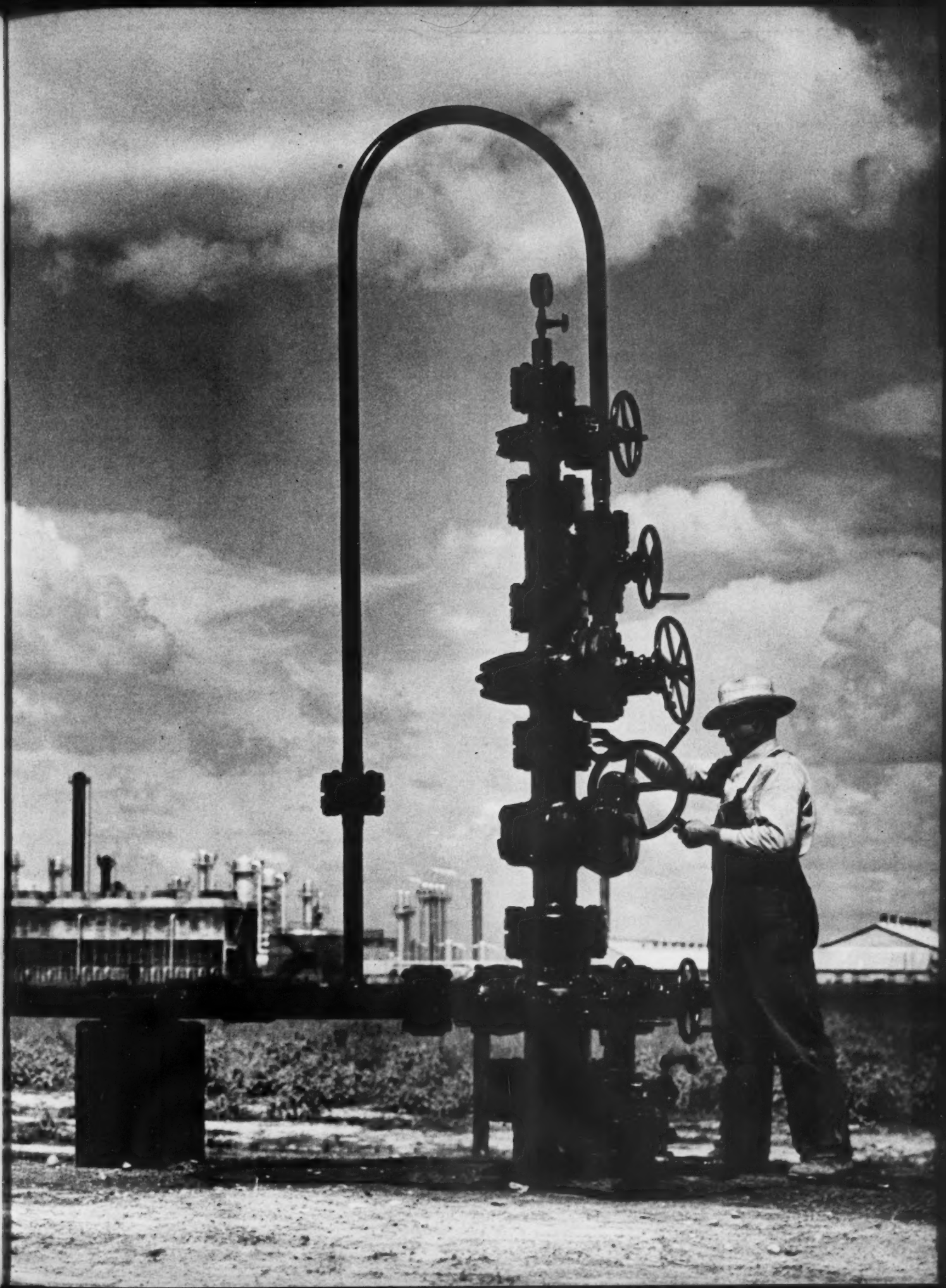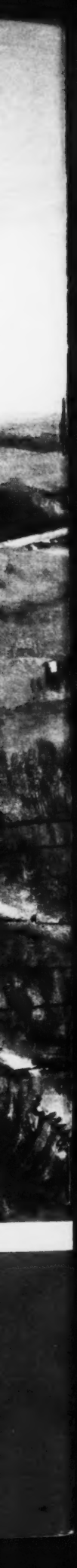
Through this maze of valves and curving swoop of line, gas that has been stripped of liquids is injected back into the producing reservoir at the Katy field, near Houston.